

Application No.: 10/072,339

Docket No.: TKHR5060-D

**In The Claims:**

Please amend claim 8 as follows:

Claim 8. (Once Amended) A high resistive thin film resistor structure comprising:

a substrate having an isolation region and an active region;

a patterned, lightly doped polysilicon layer located [above] on and in contact with the isolation region;

a diffusion barrier layer [located above] covering all the upper surface of the lightly doped polysilicon layer; and

a spacer located on and in contact with the sidewalls of the lightly doped polysilicon layer and the barrier diffusion layer.

Claim 9 (Original) The structure of claim 8, wherein the isolation region includes a shallow trench isolation structure.

Claim 10 (Original) The structure of claim 8, wherein the thickness of the polysilicon layer is about 2000 Angstrom.

Claim 11 (Original) The structure of claim 8, wherein the diffusion barrier layer includes a silicon dioxide layer.

Application No.: 10/072,339

Docket No.: TKHR5060-D

Claim 12 (Original) The structure of claim 11, wherein the silicon dioxide has a thickness of between 100 and 500 Angstrom.

Claim 13 (Previously Added) The high resistive thin film resistor structure of claim 8, wherein the diffusion barrier layer covers an entire upper surface of the lightly doped polysilicon layer.

Claim 14 (Previously Added) The high resistive thin film resistor structure of claim 8, wherein the spacer is in contact with the sidewalls of the lightly doped polysilicon layer and the barrier diffusion layer.